## PROJECT DESCRIPTION

### <u>GENERAL</u>

THIS PROJECT INVOLVES THE FULL RECONSTRUCTION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND AUGUST DRIVE. ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND COUNTDOWN PEDESTRIAN SIGNALS WILL BE INSTALLED FOR THE NORTH LEG CROSSING, VIDEO DETECTION IS PROPOSED FOR SB LEFT TURN AND SIDE STREET PRESENCE DETECTION.

MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

### INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A FOUR PHASE, FULL-TRAFFIC-ACTUATED MODE. THE EXISTING SIDE STREET PEDESTRIAN PHASE AND THE EXISTING SOUTHBOUND EXCLUSIVE/PERMISSIVE LEFT-TURN PHASE WILL REMAIN.

### CONTROLLER REQUIREMENTS

INSTALL A NEW EIGHT-PHASE FULLY ACTUATED TRAFFIC SIGNAL CONTROLLER AND ASSOCIATED HARNESSES IN A NEMA SIZE "6" BASE MOUNTED CABINET. THE MONTGOMERY COUNTY SIGNAL SHOP WILL INSTALL ONE (I) VIDEO DETECTION INTERFACE FOR 1-4 CAMERAS AND ONE (I) CENTRAL CONTROL UNIT.

## APS WILL FUNCTION AS FOLLOWS:

## FOR MD 97 (GEORGIA AVENUE)

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS GEORGIA AT AUGUST, WAIT."

WIRING DIAGRAM

D,H,K,N,T、

PEPCO NO. N/A

> PEPCO 🦟 735104

B. WHEN THE "WALK" PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE "WALK" PHASE.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS: FOUNDAMEN	TZLL TK	•
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<u>ITEM NO.</u>

## EQUIPMENT TO BE FURNISHED BY THE SHA.

<u>QUANTITY</u>

Mr. Victor Grafton District Utility Engineer Phone: 301-513-7350
Mr. Vernon Stinnett Assistant District Engineer - Maintenand Phone: 301-513-7304

Assistant District Engineer - Traffic

OFFICE OF TRAFFIC AND SAFETY: Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

Mr.Cedric Ward

Phone: 301-513-7358

Mr. Robert Snyder Assistant Division Chief, Traffic Operations 410-787-7630

Mr. Edward Rodenhizer Team Leader Signal Operations Phone: 410-787-7650

Team Leader Sign Operations 410-787-7670

Mr. Kamal Hamud Traffic Engineering 240-777-876i

Montgomery County

Mr. Eugene Bailey

Mr. Bob Ricketts Signal Shop 301-279-1975

The Power Company is: 8300 Old Marlboro Pike Upper Marlboro, MD 20442 Phone: 301-961-5325

9044	IEA	[UPDATED] CONTROLLER CABINET, SIZE 6
9086	I EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: !-4 CAMERAS
9570	41 SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN:
		I EA - MI-5(6)(24 IN. X 48 IN.) "NORTH, MD 97, RIGHT ARROW"
		3 EA - SI-I (36 IN. X 36 IN.) F.Y.G.
		3 EA - W16-7p(L) (24 IN. X 12 IN.) F.Y.G.
9571	52 SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN:
		I EA - D-3(I) (96 IN. X 16 IN.) "GEORGIA AVE"
		2 EA - D-3(I)(96 IN.X I6 IN.)DUAL FACED "AUGUST DR"

2 EA - RIO-3(I) (9 IN. X I5 IN.)

I EA - MI-5(6) (36 IN. X 72 IN.) "SOUTH, MD 97, LEFT ARROW"

"PUSH BUTTON TO CROSS GEORGIA AVENUE"

<u>DESCRIPTION</u>

## EQUIPMENT LIST 'A-I'

EQUIPMENT TO BE FURNISHED BY MONTGOMERY COUNTY

<u>ITEM NO.</u> QUANTITY <u>DESCRIPTION</u>

ΙEΑ INTERCONNECT SPLICE CABINET 9000

## EQUIPMENT LIST 'C'

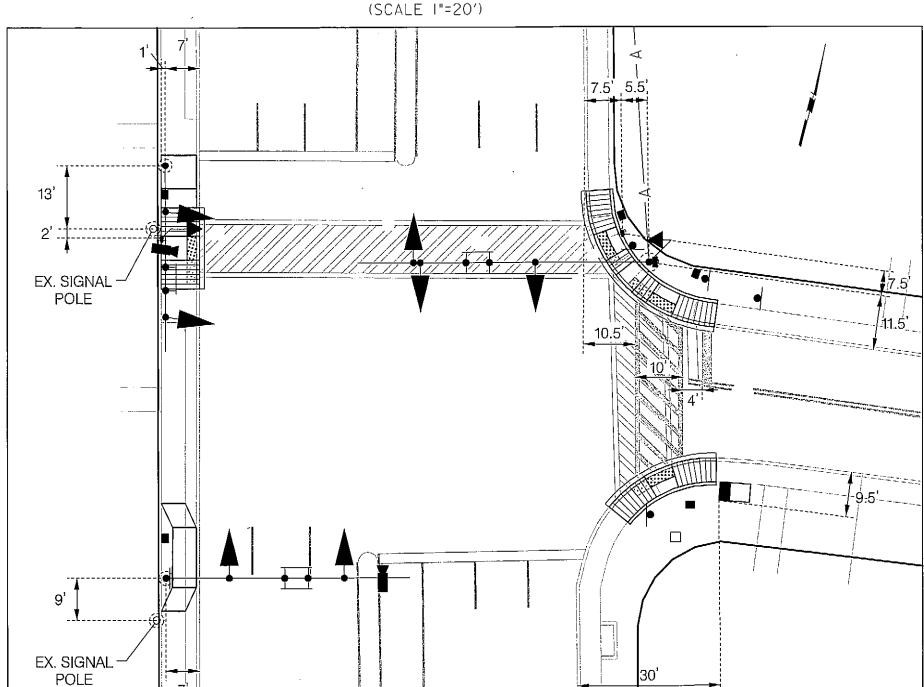
EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

<u>QUANTITY</u> <u>ITEM NO.</u> <u>DESCRIPTION</u>

NONE - ALL EQUIPMENT TO BE REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.

# SIGNAL POLE AND PAVEMENT

# MARKING DETAIL



### 5003 225 LF REMOVAL OF EXISTING PERMANENT PREFORMED PAVEMENT LINE MARKINGS ANY WIDTH 5005 160 LF 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES 15 LF 5006 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES 6002 100 LF STANDARD TYPE A COMBINATION CURB AND GUTTER 12 IN. GUTTER PAN 8 IN. DEPTH 6004 675 SF 5 INCH CONCRETE SIDEWALK 8000 LEA INSTALL INTERCONNECT SPLICE CABINET 8001 25 EA 12 INCH LED SIGNAL HEAD SECTION 8002 ΙEΑ 2 WIRE CENTRAL CONTROL UNIT 8007 2 EA AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS ΙEΑ 8011 EMBEDDED METERED SERVICE PEDESTAL 8020 2 EA LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS 8022 ΙEΑ MAST ARM POLE & 38 FT. MAST ARM ANY "T" DIMENSION 8023 ΙEΑ MAST ARM POLE & 50 FT, MAST ARM ANY "T" DIMENSION 8025 ΙEΑ MAST ARM POLE & 60 FT. MAST ARM ANY "T" DIMENSION 8028 2 EA PED POLE (ANY SIZE) 8029 LEA REMOVE & DISPOSE MATERIAL & EQUIPMENT PER ASSIGNMENT

VIDEO DETECTION CAMERA & CABLE

3 INCH ELECTRICAL CONDUIT-PVC RISER

SARLE-I SONDLICTOR, 250 KGML, SU, JISE, GOOV

DISCONNECT, PULL-BACK AND REROUTE CABLES

ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

INSTALL CONTROLLER AND CABINET - BASE MOUNT

12 PAIR COMMUNICATION CABLE, SELF-SUPPORTING AND/OR JELLYFILLED

EQUIPMENT LIST 'B'

DESCRIPTION

MAINTENANCE OF TRAFFIC

TEST PIT EXCAVATION

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

QUANTITY

3 EA

6 CY

2 EA

80 LF

30 LF

50 <u>L</u>,F

125 LF

<u>ITEM NO.</u>

1001

2002

8034

8035

8036

RNR

8039

8073

041	165 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
042	105 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
043	125 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
044	70 LF	WOOD SIGN SUPPORTS UP TO 4 X 6 INCHES
045	40 SF	DETECTABLE WARNING SURFACES
046	93 SF	INSTALL GROUND MOUNTED AND/OR OVERHEAD SIGN
048	385 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
050	I EA	WEATHER HEAD, 3 INCH
053	60 LF	ELECTRICAL CABLE I-CONDUCTOR NO. 4 AWG-THHN/THWN
054	5 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
062	280 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
064	370 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)

PHASE CHART	1	2	3	4	5	6	7	8	9	
	RYG	R Y G	1>-/>-/	(R) (Y-) Y (G-) G	RYG	(R)>(G)	R Y G			
PHASE 2 AND 5	R	R	<b>←</b> G⁄G	<b>∢</b> -G∕G	G	R	R	DW	DW	
PHASE 5 CHANGE	R	R	<b>←</b> Y⁄G	<b>←</b> Y⁄G	G	R	R	DW	DW	\ \frac{1}{7}
PHASE 2 AND 6	G	G	G	G	G	R	R	DW	DW	[ _
PHASE 2 AND 6 CHANGE	Υ	Y	Y	Y	Y	R	R	DW	DW	
PHASE 4	R	R	R	R	R	G	G	DW	DW	
PHASE 4 CHANGE	R	R	R	R	R	Υ	Y	DW	DW	T
PHASE 4 ALT.	R	R	R	R	R	G	G	W/K	W/K	00
PED CLEARANCE	R	R	R	R	R	G	G	FL⁄DW	FL⁄DW	
PHASE 4 ALT. CHANGE	R	R	R	R	R	Y	Υ	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 97 (GEORGIA AVENUE) AT AUGUST DRIVE

WHEATON, N	MARYLAND

WHEATON, MARYLAND									
GENERAL INFORMATION									
SCALE NONE	ADVERTISED_DATE	2-1-2011 (	CONTRACT NO	XX6315185					
DESIGNED BY	MCG	COUNTY	MONTGO	MERY					
DRAWN BY	DRAWN BY MCG LOGMILE 15009702.02		2.02						
CHECKED BY	MTS	TIMS NOK534		4					
F.A.P. NO TOD NO									
TS_NO_3290C=GI	DRAWING SG - 0	12 OF 02	SHEET NO.	02 OF 02					

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ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

\_ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) K ELECTRICAL CABLE - 2 L CONDUCTOR (NO. 14 AWG)

M CONTROL CABLE - 250 FT., VIDEO DETECTION CAMERA TO CONTROLLER

N-CONTROL CABLE - 500 FT., VIDEO DETECTION CAMERA TO CONTROLLER

RE-ROUTE EX. INTERCONNECT CABLE - NORTH FROM DENNIS AVENUE

RE-ROUTE EX.INTERCONNECT CABLE - SOUTH FROM FOREST GLEN RD.

ELECTRICAL CABLE I - CONDUCTOR

PROPOSED GROUND ROD - 3/4 IN.
DIAMETER X 10 FOOT LENGTH



Baltimore, MD 21244

PULL BACK EX. INTERCONNECT CABLE NORTH FROM DENNIS AVENUE P-PULL BACK EX.INTERCONNECT CABLE - SOUTH FROM FOREST GLEN RD.

 $\sim$  D,H,K,L,N,T

A,B,D,H,J,K,L,N,S,T,

4,B,C,D,H,J,K,L,T

K,L,M,N,R,S,T,

S | 12 PAIR COMMUNICATION CABLE - JELLYFIELD

T NO.6 AWG STRANDED BARE COPPER GROUND WIRE

W NO. 4 AWG-THHN/THWN

PPS PROPOSED UNDERGROUND POWER SERVICE CABLE I-CONDUCTOR, 250 KCML, CU, USE, 600V